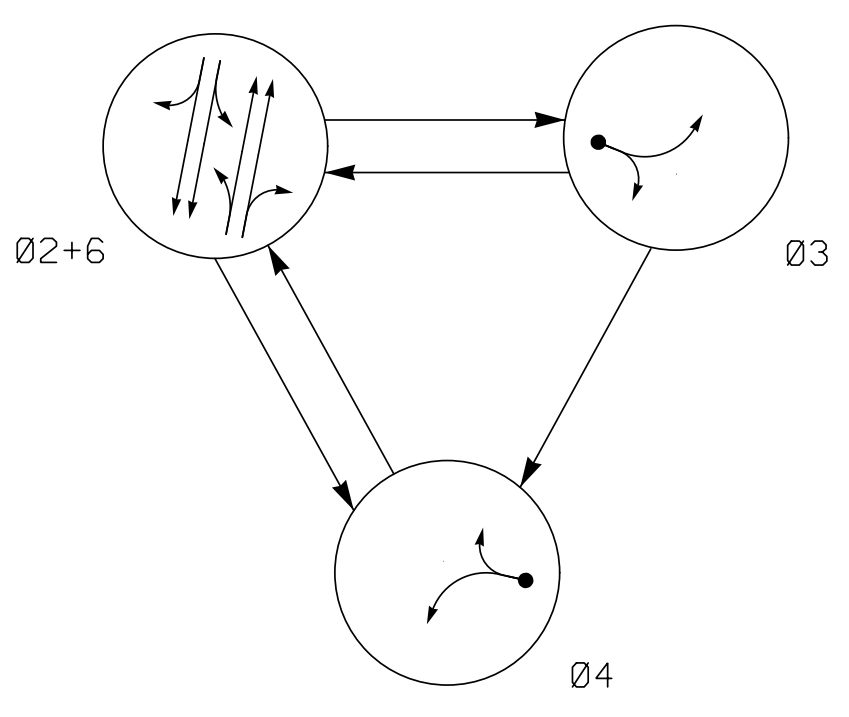


PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- ⇄ PEDESTRIAN MOVEMENT

TABLE OF OPERATION

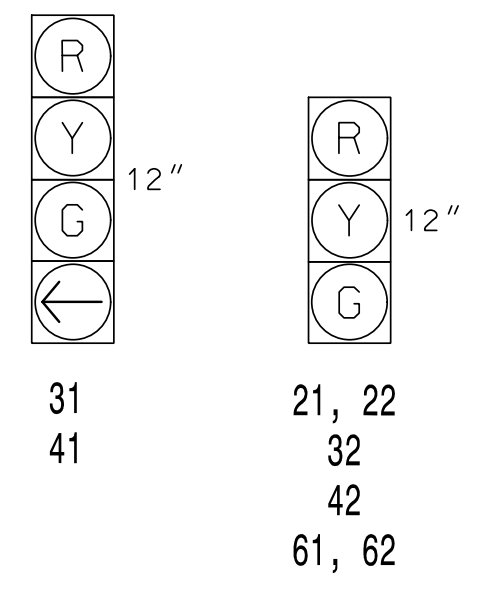
SIGNAL FACE	PHASE			
	Ø 2 + 6	Ø 3	Ø 4	FLIGHT
21, 22	G	R	R	Y
31	R	G	R	R
32	R	G	R	R
41	R	R	G	R
42	R	R	G	R
61, 62	G	R	R	Y

DETECTOR INSTALLATION CHART

LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PROGRAMMING							
					PHASE	CALLING	EXTEND TIME	DELAY TIME	USE ADDED INITIAL	TYPE	SYSTEM LOOP	NEW CARD
3A	6X40	0	2-4-2	-	3	Yes	-	-	-	N	-	X
3B	6X6	0	EXIST	-	3	Yes	-	10	-	N	-	X
4A	6X60	+5	2-4-2	-	4	Yes	-	-	-	N	-	X
S1	6X6	+540	EXIST	-	-	No	-	-	-	N	X	X
S2	6X6	+540	EXIST	-	-	No	-	-	-	N	X	X

SIGNAL FACE I.D.

All Heads L.E.D.

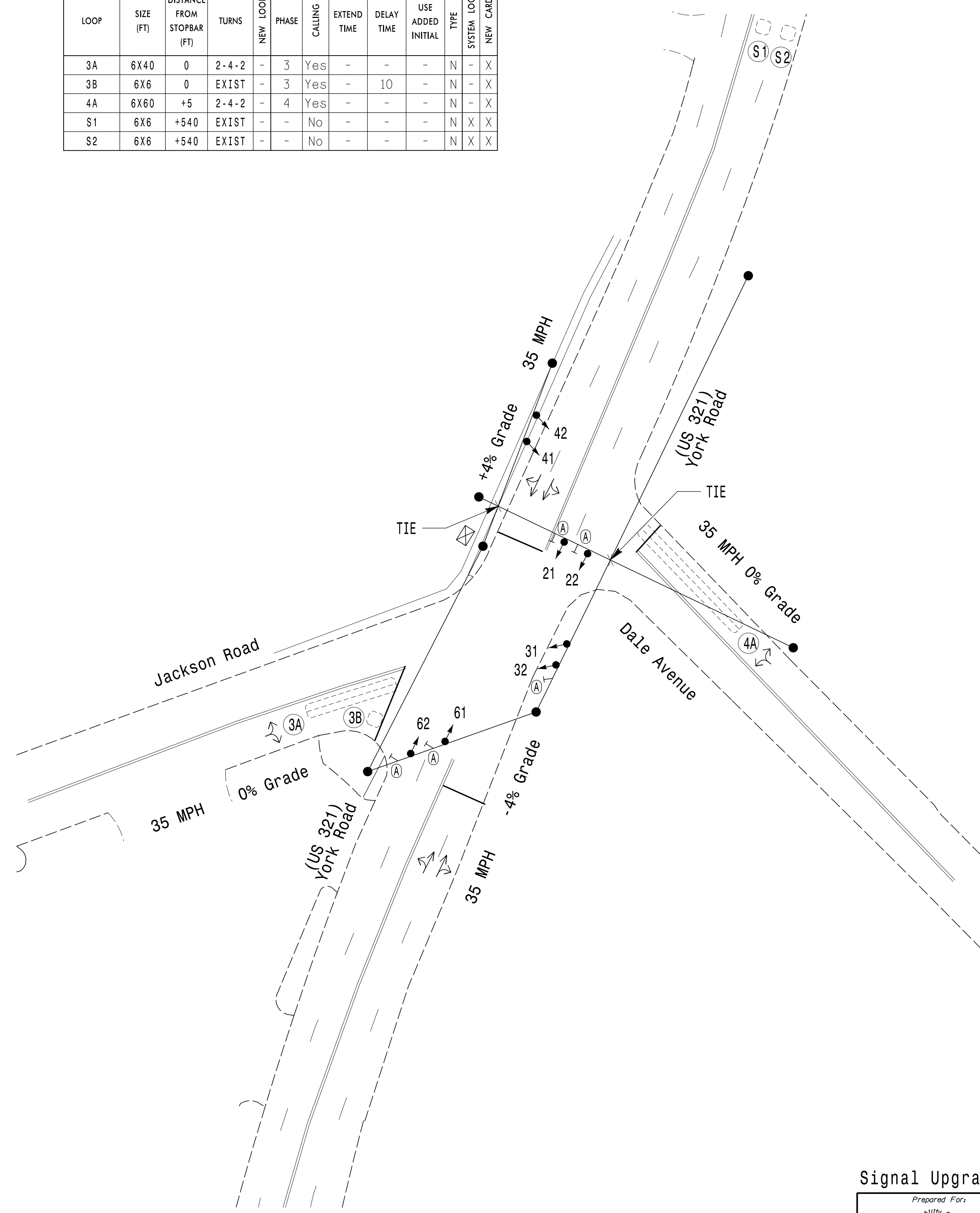


31, 41
21, 22, 32, 42, 61, 62

TIMING CHART

FEATURE	PHASE			
	2	3	4	6
Min Green *	10	10	7	10
Walk *	-	-	-	-
Ped Clear	-	-	-	-
Veh. Extension *	-	3.0	2.0	-
Max 1 *	45	25	25	45
Yellow	4.1	3.0	3.0	4.1
Red Clear	3.0	3.9	4.1	3.0
Red Revert	2.0	2.0	2.0	2.0
Actuations B4 Add *	-	-	-	-
Seconds / Actuation *	-	-	-	-
Max Initial *	-	-	-	-
Time Before Reduction *	-	-	-	-
Time To Reduce *	-	-	-	-
Minimum Gap	-	-	-	-
Locking Detector	-	-	-	-
Recall Position	MAX RECALL	-	-	MAX RECALL
Dual Entry	-	-	-	-
Simultaneous Gap	X	X	X	X

* These values may be field adjusted. Do not adjust Min Green and Extension times for phases 2 and 6 lower than what is shown. Min Green for all other phases should not be lower than 4 seconds.



3 Phase Semi-Actuated Gastonia Signal System

NOTES

- Refer to "Roadway Standard Drawings NCDOT" dated January 2018 and "Standard Specifications for Roads and Structures" dated January 2018.
- Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- The order of phase 3 and phase 4 may be reversed.
- Set all detector units to presence mode.
- In the event of loop replacement, refer to the current ITS and Signal Design Manual and submit a Plan of Record to the Signal Design Section.
- Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
- Pavement markings are existing.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values shall supersede these values.
- Install new cabinet on the existing cabinet foundation.
- All new cabinets and base extenders shall be black in color. See Project Special Provisions for details.
- City system data:
Controller Asset: #0067

LEGEND

- | PROPOSED | EXISTING |
|--|----------|
| ○ → Traffic Signal Head | ● → N/A |
| ○ → Modified Signal Head | ○ → N/A |
| ⊥ Sign | ⊥ N/A |
| ⊥ Pedestrian Signal Head With Push Button & Sign | ⊥ N/A |
| ○ → Signal Pole with Guy | ● → N/A |
| ○ → Signal Pole with Sidewalk Guy | ● → N/A |
| ⊠ Inductive Loop Detector | ⊠ N/A |
| ⊠ Controller & Cabinet | ⊠ N/A |
| ⊠ Junction Box | ⊠ N/A |
| --- 2-in Underground Conduit | --- N/A |
| N/A Right of Way | --- N/A |
| → Directional Arrow | → N/A |
| (A) Street Name Sign (D3-1) | (A) N/A |

Signal Upgrade

Prepared For:

 750 N. Greenfield Pkwy, Garner, NC 27529
 NC License #0102
 421 Fayetteville Street, Suite 600
 Raleigh, NC 27601
 (919) 677-2000

(US 321) York Rd. at Jackson Rd./Dale Ave.

Division 12 Gaston County Gastonia

PLAN DATE: May 2021 REVIEWED BY: SL Phillips
 PREPARED BY: CF Davis REVIEWED BY: KP Baumann

REVISIONS	INIT.	DATE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

DocuSigned by:

 DATE: 3/11/2022
 SIGNATURE: KEVIN P. BAUMANN
 DATE: 3/11/2022

SIG. INVENTORY NO. 12-0067

3/9/2022 11:13:50 AM Dantellb.Cur1 ***Kinley-Horn.comSE_RAL\MRAL\TIPDK-TIS\011036569_Gastonia Signal System9_Signal\KWS4 - Signal Design\12067-2021.dgn